

# Work Order ID 84841

**\*84841\***

Page 1

May-24-12 7:57:57 AM

Item ID: D2724-041  
Revision ID:  
Item Name: 206L Step Assembly

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 2.00 **\*2\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 2.00 **\*2\***

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/05/20

Tooling:

Date:

Run Start **\*NR1\***

QC: Date: SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D2724	Rev C

100 Large Fab 0.00

**\*100\***

Large Fab

Large Fab

Memo

0.00

Cut D2724-1 using D2622 extrusion as per Dwg D2724  
Deburr and bevel ends for welding

2  $\phi$  ~~AE~~ Ae  
12.07.05

110 Large Fab 0.00

**\*110\***

Large Fab

Large Fab

Memo

0.00

Weld end cap and lugs as per Dwg D2724 using Jig DT8884 followed by  
Jig  
DT (One End Only)  
A/R AL ROD Batch: 120354  
Grind end cap welds flush 120130

2  $\phi$  ~~AE~~ Ae  
12.07.05  
Ae  
12.07.10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*84841\***

Page 2

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

**Start Date:** 24/05/2012    **Start Qty:** 2.00    **\*2\***

**Cust Item ID:**

**Required Date:** 07/06/2012      **Req'd Qty:** 2.00      **\*~\***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84841

May-24-12 7:57:57 AM

**\*84841\***

Page 3

Item ID: D2724-041  
Revision ID:  
Item Name: 206L Step Assembly

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 2.00 **\*2\***  
Required Date: 07/06/2012 Req'd Qty: 2.00 **\*2\***

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 <b>*150*</b> QC Quality Control	QC3- Inspect Part Finish <b>QC7</b> Memo	0.00  0.00				2	0	127-12	
160 <b>*160*</b> Large Fab Large Fab	Large Fab Memo Inspect for foreign object per QSI 024 Weld Remaining end cap as per Dwg D2724 using Jig DT8884 followed by Jig DT A/R AL ROD Batch: <b>120854</b> Grind per dwg D2724	0.00  0.00				2	0	12.07.13 12.07.16	
170 <b>*170*</b> QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00  0.00							

15 12/04/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84841

May-24-12 7:57:57 AM

**\*84841\***

Page 4

Item ID: D2724-041  
Revision ID:  
Item Name: 206L Step Assembly

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Stop **\*NS2\***

Start Date: 24/05/2012 Start Qty: 2.00 **\*2\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 2.00 **\*2\***

Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start **\*NR1\***

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 <b>*180*</b> QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 DAS 15 39 17/07/17				72 4			
190 <b>*190*</b> HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00				2	26	12-7-17	
200 <b>*200*</b> Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum  Memo START TIME: 9:30 OVEN TEMPERATURE: 320 °F FINISH TIME: 10:00	0.00				2X LH		M-L 12/07/17	

W121841

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 84841

May-24-12 7:57:57 AM

**\*84841\***

Page 6

Item ID: D2724-041

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: 206L Step Assembly

Start Date: 24/05/2012 Start Qty: 2.00

**\*2\***

Cust Item ID:

Required Date: 07/06/2012 Req'd Qty: 2.00

**\*2\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

240

Identify as per dwg & Stock Location:

0.00

**\*240\***

Packaging

Memo

*PM 84841* 0.00

*12/7/19*

Packaging

250

QC21- Final Inspection - Work Order Release

0.00

**\*250\***

QC

Memo

0.00

*12/7/20*

Quality Control

*MR*

*12-07-19*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-24-12 7:58:01 AM

Page 1

Work Order ID: 84841

\*84841\*

Parent Item: D2724-041

\*D2724-041\*

Parent Item Name: 206L Step Assembly

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:E As Per Ecn 766 06-01-06 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D2622-120C

Manufactured No

100

Each

30.6100

1

2

\*D2622-120C\*

Step Extrusion

\*\*

B83894 (2) Cle 12.07.05

Location

Loc Qty

Loc Code

HALL

16.37

46910

2

64409

6

66970

7.7

68293

0.25

72131

0.42

WA

4.88

81507

4.88

WA013

9.36

75781

2

77612

7.36

D2734

Manufactured No

110

Each

51.0000

1

2

\*D2734\*

Step End Plate

\*\*

12.07.09

Location

Loc Qty

Loc Code

WA

B84563

51

76985

5

80682

16

83322

30

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

May-24-12 7:58:01 AM

Page 2

Work Order ID: 84841

**\*84841\***

Parent Item: D2724-041

**\*D2724-041\***

Parent Item Name: 206L Step Assembly

Start Date: 24/05/2012

Required Date: 07/06/2012

Start Qty: 2.00

Required Qty: 2.00

D3458-1

Manufactured No

110

Each

19.0000

2

4

**\*D3458-1\***

Step Mounting Plate

\*\*

*12.07.09*

Location

Loc Qty

Loc Code

WA

16

82117

16

WA002

2

75609

2

WA018

1

63075

1

D3458-3

Manufactured No

110

Each

29.0000

2

4

**\*D3458-3\***

Step Mounting Plate

\*\*

*12.07.09*

Location

Loc Qty

Loc Code

WA

24

82116

24

WA002

5

75610

5

D2734

Manufactured No

160

Each

51.0000

1

2

**\*D2734\***

Step End Plate

\*\*

*12.07.09*

Location

Loc Qty

Loc Code

WA

51

76985

5

80682

16

83322

30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

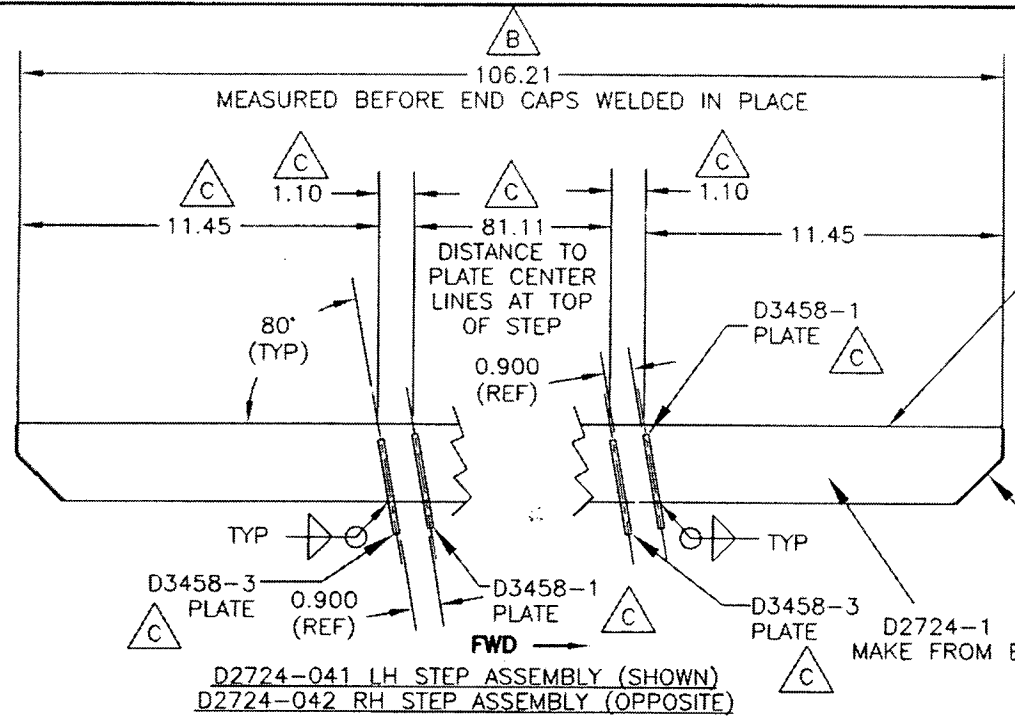
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



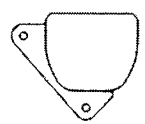
**DART**

RELEASED  
05.11.14



NOTE: ALL WELDS SHALL BE 100% VISUALLY INSPECTED BY A QUALIFIED INSPECTOR PER DART QSI 004

APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS

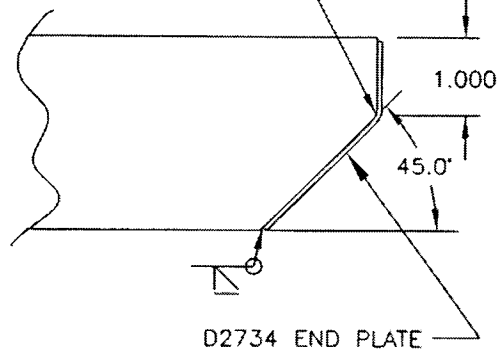


REFER TO STEP END DETAIL

**D2721-041/-042 STEP ASSEMBLY PARTS LIST**

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D2724-041	LH STEP ASSEMBLY
	X	D2724-042	RH STEP ASSEMBLY
1	1	D2622-107	EXTRUSION
2	2	D2734	END PLATE
2	2	D3458-1	PLATE
2	2	D3458-3	PLATE

ROUND CORNER OF EXTRUSION TO MATCH BEND RADIUS OF END PLATE



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

**D2724-041/-042 STEP ASSEMBLY**

- 1) MAKE FROM EXTRUSION D2622
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

WORK ORDER  
NO. 89841405  
12/05/20  
TYPICAL STEP END DETAIL  
NOT TO SCALE

DESIGN	KE	DRAWN BY	PH	DART AEROSPACE USA, INC.	
CHECKED		APPROVED		DRAWING NO.	PORT HADLOCK, WA
DATE	05.09.19			D2724	
				TITLE	
				206L/407 STEP ASSEMBLY	
				NEW ISSUE	
				UPDATED WELD DETAIL REVISED TOLERANCES	
				RE-DESIGN, ADD D3458-1/-3	
				SCALE	
				NTS	
				SHEET 1 OF 1	
				REV. C	

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.

Copyright © 2005 by DART AEROSPACE USA, INC.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries